WHAT IS CLAIMED IS:

1. A component placement machine for placing components on printed circuit boards, the machine comprising:

a component storage area;

a component placement system for taking components from the component storage area and placing the components on the printed circuit boards;

an enclosure surrounding the component storage area; and

a dry gas delivery system for delivery of a dry gas to the storage area to maintain a dry atmosphere and to prevent moisture from being absorbed by the components.

2. The machine of Claim 1, wherein the component storage area includes trays containing the components.

3. The machine of Claim 1, wherein the component storage area includes tapes containing the components.

4. The machine of Claim 1, wherein the component storage area includes sticks containing the components.

5. The machine of Claim 1, wherein the component storage area includes components in bulk storage.

6. The machine of Claim 1, wherein a flow rate of the dry gas delivered to the storage area is controlled by a control system including a humidity sensor within the component storage area.

7. The machine of Claim 1, wherein the dry gas is delivered to the component storage area at a first flow rate when the storage area is open and is delivered at a second flow rate when the storage area is closed.

8. The machine of Claim 7, wherein the first flow rate is higher than the second flow rate.

9. A method of mounting electronic components on a printed circuit board, the method comprising:

storing electronic components in a storage area of a surface mount device placement machine;

maintaining a dry atmosphere in the storage area by enclosing the storage area and injecting dry gas into the storage area;

removing the components from the storage area; and

mounting the components on a printed circuit board.

10. The method of Claim 9, wherein the storage area includes trays containing the components.

11. The method of Claim 9, wherein the storage area includes tapes containing the components.

12. The method of Claim 9, wherein the storage area includes sticks containing the components.

13. The method of Claim 9, wherein the storage area includes components in bulk storage.

14. The method of Claim 9, wherein the dry atmosphere in the storage area is provided by delivering a dry gas to the storage area.

15. The method of Claim 14, wherein a flow rate of the dry gas delivered to the storage area is controlled by a control system including a humidity sensor within the storage area.

16. The method of Claim 14, wherein the dry gas is delivered to the storage area at a first flow rate when the storage area is open and is delivered at a second flow rate when the storage area is closed.

17. The method of Claim 16, wherein the first flow rate is higher than the second flow rate.

18. The method of Claim 9, further comprising removing about 0.1% or more of the weight of the component by elimination of moisture while the components are stored in the storage area.